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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,264	09/19/2003	Ian Anthony Jones	Q90171	7763
23373 7590 03/22/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER ELVE, MARIA ALEXANDRA	
			ART UNIT 1725	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/22/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/666,264

**Applicant(s)**

JONES ET AL.

**Examiner**

M. Alexandra Elve

**Art Unit**

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 12, 13, 15, 17-25 and 27-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12, 13, 15, 17-25 and 27-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/806,613.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Specification***

The limitation "organic dye" is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "organic dye" was not present in the original specification and claims.

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Rejections - 35 USC § 112***

Claims 1-8, 12-13, 15, 17-25, 27-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. "Organic dye" was not present in the original specification or claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 12-13, 15, 17-21, 27 & 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Corrsin (USPN 3,477,194).

Corrsin discloses the sealing of thermoplastic thin materials using infrared radiation and a carbon material in between the materials. The carbon substance is printed onto a board, which is faced or overlaid with a thermoplastic material. The coating and film are welded throughout the area overlying the infrared absorbing material. Absorbers may also be in form of inks. Lamps or carbon dioxide lasers can be used. An absorber can be a visually transparent radiation absorber that is selective to radiation in a certain range of wavelengths. Radiation is chosen in a certain range of wavelengths, in this case infrared. Specifically two plastic films where one film is a pigmented film and the other film are visually transparent. The layer of material, which is capable of absorbing radiation, is interposed between the two films in the areas to be sealed and the package is irradiated. Hence the films are sealed together by a substantially visually transparent radiation absorber, which selectively absorbs radiation, thus causing a concentration in heat in areas where such absorber has been applied and thereby effecting sealing. (abstract, figures, col. 1, lines 20-50, col. 2, lines 24-57, col. 3, lines 30-71, col. 4, lines 5-50)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 12-13, 15, 17-21 & 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muellich (USPN 5,893,959) and in view of Corrsin.

Muellich discloses the welding of thermoplastic materials using a laser beam. The transmission coefficient is used in the formation of a bond. Workpieces may be opaque, colored with dye or transparent. After welding, the individual workpiece parts are substantially no longer distinguishable by the human eye. The proportions of the workpiece parts are joined in the visible region and dye pigment may be used for joining. Wavelengths of 1.06 um may be used. (abstract, figures, col. 3, lines 5-10, col. 7, lines 40-65, col. 8, lines 34-67).

Muellich does not specifically teach use of the infrared.

Corrsin discloses the sealing of thermoplastic thin materials using infrared radiation and a carbon material in between the materials. (abstract, figures, col. 1, lines 20-50, col. 2, lines 24-57, col. 3, lines 30-71, col. 4, lines 5-50)

It would have been obvious to one of ordinary skill in the art at the time of the invention to use infrared radiation as taught by Corrsin in the Muellich process because it is a known wavelength to impart welding and hence is a functional equivalent.

Claims 22-25 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corrsin, as stated in the above paragraph and further in view of Osborne (USPN 4,069,080).

Corrsin does not specifically teach the use of fabrics/textiles, polyester, fluoropolymer and so forth.

Osborne discloses bonding superposed sheets of polymeric material. A CO<sub>2</sub> gas laser is used for welding the plastic materials, as the energy in the beam generated by the laser has wavelengths that are readily absorbed in the thermoplastic materials such as copolymers of vinyl chloride and vinylidene chloride and so forth. It would have been obvious to one of ordinary skill in the art at the time of the invention to sheet material, thermoplastics and so forth because this is merely a design substitution.

The types of materials chosen are a choice in design and substitutions of known equivalent structures may be made. In re Kuhle 188 (CCPA 1975) and In re Ruff 118 USPQ 343 (CCPA 1958). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a fluoropolymer because it is a polymeric substitute.

Claims 22-25 & 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muellich and Corrsin, as stated in the above paragraph and further in view of Osborne.

Muellich does not specifically teach the use of fabrics/textiles, thin films, polyester, fluoropolymer or nylon.

Osborne discloses bonding superposed sheets of polymeric material. A CO<sub>2</sub> gas laser is used for welding the plastic materials, as the energy in the beam generated by the laser has wavelengths that are readily absorbed in the thermoplastic materials such as copolymers of vinyl chloride and vinylidene chloride and so forth. It would have been

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obvious to one of ordinary skill in the art at the time of the invention to sheet material, nylon and so forth because this is merely a design substitution.

The types of materials chosen are a choice in design and substitutions of known equivalent structures may be made. In re Kuhle 188 (CCPA 1975) and In re Ruff 118 USPQ 343 (CCPA 1958). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a fluoropolymer because it is a polymeric substitute.

### ***Response to Amendment***

The amendment filed 6/20/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "organic dye".

Applicant is required to cancel the new matter in the reply to this Office Action. Claims 30-33 cannot be further treated on the merits.

### ***Response to Arguments***

The examiner has not considered the declaration at this present time. The examiner will fully consider the declaration when the new matter issues have been resolved.



**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is 571-272-1173. The examiner can normally be reached on 6:30-3:00 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 19, 2007.

  
M. Alexandra Elve  
Primary Examiner 1725